Amendments to the Claims:

The following listing of claims will replace all prior versions and listings of claims.

Listing of Claims

- 1-21 (Canceled)
- 22. (New) An isolated polynucleotide comprising the nucleic acid sequence of ORF ID 1 of Contig ID 51, represented by nucleotides 984 to 2066 of SEQ ID NO:51.
- 23. (New) The isolated polynucleotide of claim 22, wherein said polynucleotide comprises a heterologous polynucleotide sequence.
- 24. (New) The isolated polynucleotide of claim 23, wherein said heterologous polynucleotide sequence encodes a heterologous polypeptide.
- 25. (New) A method for making a recombinant vector comprising inserting the isolated polynucleotide of claim 22 into a vector.
 - 26. (New) A nucleic acid sequence complementary to the polynucleotide of claim 22.
 - 27. (New) A recombinant vector comprising the isolated polynucleotide of claim 22.
- 28. (New) The recombinant vector of claim 27, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.
 - 29. (New) A recombinant host cell comprising the isolated polynucleotide of claim 22.
- 30. (New) The recombinant host cell of claim 29, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.
- 31. (New) An isolated polynucleotide for the detection of *Borrelia burgdorferi*, wherein said isolated polynucleotide comprises at least 50 contiguous nucleotides of the nucleic acid sequence of ORF ID 1 of Contig ID 51, represented by nucleotides 984 to 2066 of SEQ ID NO:51.

2

Application No.: 09/830,228

- 32. (New) The isolated polynucleotide of claim 31, wherein said polynucleotide comprises a heterologous polynucleotide sequence.
- 33. (New) The isolated polynucleotide of claim 32, wherein said heterologous polynucleotide sequence encodes a heterologous polypeptide.
- 34. (New) A method for making a recombinant vector comprising inserting the isolated polynucleotide of claim 31 into a vector.
 - 35. (New) A nucleic acid sequence complementary to the polynucleotide of claim 31.
 - 36. (New) A recombinant vector comprising the isolated polynucleotide of claim 31.
- 37. (New) The recombinant vector of claim 36, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.
 - 38. (New) A recombinant host cell comprising the isolated polynucleotide of claim 31.
- 39. (New) The recombinant host cell of claim 38, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.
 - 40. (New) A method for detecting Borrelia burgdorfert comprising:
- (a) contacting a biological sample with the isolated polynucleotide of claim 22; and
 - (b) detecting the presence or absence of Borreliu burgdorferi in the sample.
 - 41. (New) A method for detecting Borrelia burgdorferi comprising:
- (a) contacting a biological sample with the isolated polynucleotide of claim 31; and
 - (b) detecting the presence or absence of Borrelia burgdorfert in the sample.

3